Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application where added material is shown in underlined type, deleted material is shown in strikeout type or within double brackets:

Listing of Claims:

1. (Currently amended)   A method of increasing a quantity of differentiable programming content available in a digital programming transmission stream comprising:

creating a plurality of digital programming components, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content;

defining a plurality of subsets of the plurality of digital programming components to comprise a plurality of component programming segments, wherein each component programming segment is also a unit of differentiable programming content; and

inserting the plurality of component programming segments into the digital programming transmission stream, wherein the plurality of component programming segments replace the standard digital programming segment in the digital programming;

wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content available in the digital programming transmission stream is increased.

2. (Previously presented)   A method of providing an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content transmitted via a digital programming transmission stream, to a plurality of users, the method comprising:

synchronizing a plurality of digital programming components, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content;

10186770.2

defining a plurality of subsets of the plurality of digital programming components to comprise a plurality of component programming segments, wherein each component programming segment is also a unit of differentiable programming content; and

inserting the plurality of programming segments into the digital programming transmission stream, wherein the plurality of programming segments replace the standard digital programming segment in the digital programming transmission stream; and

transmitting the digital programming transmission stream to the plurality of users;

wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content transmitted in the digital programming transmission stream is increased.

3. (Previously presented)   A method of receiving an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content received by at least one user via a digital programming transmission stream, the method comprising:

receiving a plurality of synchronized digital programming components in the digital programming transmission stream, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content; and

selecting for presentation a plurality of subsets of the plurality of digital programming components, wherein each subset comprises at least one component programming segment, and the plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream,

wherein each component programming segment is also a unit of differentiable programming content; wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content received in the digital programming transmission stream is increased.

4. (Currently amended)   A method for creating differentiable programming content, wherein a quantity of differentiable programming content available for transmission in a digital programming

transmission stream is increased, the method comprising:

creating a plurality of digital programming components, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content;

synchronizing the plurality of digital programming components; and

defining a plurality of subsets of the plurality of digital programming components to comprise a plurality of component programming segments, wherein the plurality of subsets subset of the digital programming components replaces the standard digital programming components replaces the standard digital programming segment in the programming transmission stream,

wherein each component programming segment is also a unit of differentiable programming content; wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content available for transmission in the digital programming transmission stream is increased.

5. (Original)   A method as described in claim 1 further comprising inserting the plurality of digital programming components into the digital programming transmission stream.

6-8. (Canceled)

9. (Original)   A method as described in claim 5 wherein the plurality of digital programming components is inserted into the digital programming transmission stream in addition to the standard digital programming segment.

10. (Previously presented)   A method as described in claim 1 wherein the standard digital . programming segment is reduced in quality and therefore utilizes less than the bandwidth normally allocated for a standard digital programming segment.

11. (Original)   A method as described in claim 9 wherein the standard digital programming segment is reduced in quality and therefore utilizes less than the bandwidth normally allocated for a standard digital programming segment.

12. (Canceled)

13. (Original) A method as described in claim 3 wherein the plurality of digital programming components is received in the digital programming transmission stream in addition to the standard digital programming segment.

14. (Original) A method as described in claim 13 wherein the standard digital programming segment is reduced in quality and therefore utilizes less than the bandwidth normally allocated for a standard digital programming segment.

15. (Original) A method as described in claim 1, claim 2, claim 3, or claim 4 wherein the plurality of digital programming components are selected from the group consisting of: video, still-frame video, audio, graphics, text, animation, and media objects.

16. (Original) A method as described in claim 15 wherein the still-frame video comprises scalable video frames.

17. (Original) A method as described in claim 15 wherein the audio comprises less than CD-quality audio.

18. (Original) A method as described in claim 1, claim 2, or claim 4 further comprising digitally compressing the plurality of digital programming components.

19. (Original) A method as described in claim 3 further comprising digitally decompressing the plurality of digital programming components.

20. (Original) A method as described in claim 1 wherein the digital programming transmission stream is carried over a transmission medium selected from the group consisting of: terrestrial television broadcast, cable, satellite, microwave, radio, telephony, wireless telephony, digital subscriber line, fiber optic, a personal communications network, and a communication

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network.

21. (Original)   A method as described in claim 2 wherein the digital programming transmission stream is transmitted over a transmission medium selected from the group consisting of: terrestrial television broadcast, cable, satellite, microwave, radio, telephony, wireless telephony, digital subscriber line, fiber optic, a personal communications network, and a communication network.

22. (Original)   A method as described in claim 3 wherein the digital programming transmission stream is received over a transmission medium selected from the group consisting of: terrestrial television broadcast, cable, satellite, microwave, radio, telephony, wireless telephony, digital subscriber line, fiber optic, a personal communications network, and a communication network.

23. (Original)   A method as described in claim 20, claim 21, or claim 22 wherein the communication network is selected from the group consisting of: the Internet, an intranet, a local area network, a wide area network, a public network, and a private network.

24. (Original)   A method as described in claim 1, claim 2, claim 3, or claim 4 wherein the differentiable programming content comprises advertising programming content.

25. (Original)   A method as described in claim 1, claim 2, claim 3, or claim 4 wherein the differentiable programming content comprises programming content selected from the group consisting of: news, sports, entertainment, situation comedy, music video, game show, movie, drama, educational programming, interactive video gaming, and live programming.

26. (Original)   A method as described in claim 1 further comprising synchronizing the plurality of digital programming components.

27. (Original)   A method as described in claim 1 further comprising targeting the at least one component programming segment toward at least one of a plurality of users receiving the digital

programming transmission stream.

28. (Original)   A method as described in claim 2 further comprising targeting the at least one component programming segment toward at least one of the plurality of users to provide particular differentiable programming content to the at least one of the plurality of users.

29. (Original)   A method as described in claim 28 wherein the at least one component programming segment is targeted toward the at least one of the plurality of users based upon user profile information of the at least one of the plurality of users accessible by the programming transmission system.

30. (Original)   A method as described in claim 3 further comprising determining whether the at least one component programming segment is targeted toward the at least one user to provide particular differentiable programming content to the at least one user, and wherein the step of selecting is based upon a determination that the at least one component programming segment is targeted toward the at least one user.

31. (Original)   A method as described in claim 30 further comprising accessing user profile information of the at least one user to determine whether the at least one component programming segment is targeted toward the at least one user based upon the user profile information of the at least one user.

32. (Original)   A method as described in claim 3 further comprising outputting the at least one component programming segment to a presentation device for presentation to the at least one user.

33. (Original)   A method as described in claim 3 further comprising switching from a first of the at least one component programming segment to a second of the at least one component · programming segment.

34. (Original)   A method as described in claim 33 further comprising outputting the first and

10186770.2

second of the at least one component programming segment in sequence to a presentation device for presentation to the at least one user, and wherein the step of switching is seamless, whereby the switch is performed without a delay perceptible by the at least one user between presentation of the first of the at least one component programming segment and presentation of the second of the at least one component programming segment on the presentation device.

35. (Original)   A method as described in claim 32 or claim 34 wherein the presentation device comprises a device selected from the group consisting of: television, radio, video tape player, audio tape player, digital video disk player, compact digital disk player, minidisk player, digital file player, video game player, computer, personal digital assistant device, telephone, wireless telephone, and a telephony device for the deaf.

36. (Previously presented)   A system for providing an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content transmitted via a digital programming transmission stream, to a plurality of users, the system comprising:

an encoder that interleaves a plurality of synchronized digital programming components, wherein a plurality of subsets of the plurality of digital programming components comprise a plurality of component programming segments, wherein the plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream, and each component programming segment is a unit of differentiable programming content; and

a transmitter that transmits the plurality of digital programming components in the digital programming transmission stream to the plurality of users, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is also a unit of differentiable programming content;

wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content transmitted in the digital programming transmission stream by the transmitter is increased.

37. (Currently amended)   A system for receiving an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content received by at least one user via a digital programming transmission stream, the system comprising:

a tuner that receives a plurality of synchronized digital programming components in the digital programming transmission stream, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content;

a decoder that separates and selects a plurality of subsets of the plurality of digital programming components, the plurality of subsets each comprise at least one component programming segment, wherein the plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream and wherein each component programming segment is also a ~~unity~~ unit of differentiable programming content;

a program output that outputs at least one component programming segment to a presentation device for presentation of the at least one component programming segment to the at least one user; and

a processor that coordinates and directs the functions of the tuner, the decoder, and the program output;

wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content in the digital programming transmission stream received by the receiver is increased.

38. (Previously presented)   A system for providing an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content transmitted via a digital programming transmission stream, to a plurality of users, the system comprising:

a means for combining a plurality of synchronized digital programming components, wherein a plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream and wherein each subset of

the plurality of digital programming components comprise at least one component programming segment, and each component programming segment is a unit of differentiable programming content; and

a means for transmitting the plurality of digital programming components in the digital programming transmission stream to the plurality of users, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is also a unit of differentiable programming content;

wherein, without increasing the bandwidth normally allocated for a standard digital programming segment, the quantity of differentiable programming content transmitted in the digital programming transmission stream by the transmitting means is increased.

39. (Currently amended)   A system for receiving an increased quantity of differentiable programming content in a programming transmission system, the differentiable programming content received by at least one user via a digital programming transmission stream, the system comprising:

a means for receiving a plurality of synchronized digital programming components in the digital programming transmission stream, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a standard digital programming segment, wherein the standard digital programming segment is a unit of differentiable programming content;

a means for selecting at least one subset of the plurality of digital programming components, the at least one subset comprising at least one component programming segment, wherein a plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream and wherein each programming segment is also a unity unit of differentiable programming content;

a means for outputting the at least one component programming segment to a means for presenting the at least one component programming segment to the at least one user; and

a means for processing that coordinates and directs the functions of the receiving means, the selecting means, and the outputting means;

wherein, without increasing the bandwidth normally allocated for a standard digital

programming segment, the quantity of differentiable programming content in the digital programming transmission stream received by the receiving means is increased.

40-41. (Canceled)

42. (Original)   A system as described in claim 36 wherein the transmitter transmits the plurality of digital programming components in the digital programming transmission stream in addition to the standard digital programming segment.

43. (Original)   A system as described in claim 38 wherein the transmitting means transmits the plurality of digital programming components in the digital programming transmission stream in addition to the standard digital programming segment.

44-45. (Canceled)

46. (Original)   A system as described in claim 37 wherein the receiver receives the plurality of digital programming components in the digital programming transmission stream in addition to the standard digital programming segment.

47. (Original)   A system as described in claim 39 wherein the receiving means receives the plurality of digital programming components in the digital programming transmission stream in addition to the standard digital programming segment.

48. (Original)   A system as described in claim 42, claim 43, claim 46, or claim 47 wherein the standard digital programming segment is reduced in quality and therefore utilizes less than the bandwidth normally allocated for a standard digital programming segment.

49. (Original)   A system as described in claim 36, claim 37, claim 38, or claim 39 wherein the plurality of digital programming components are selected from the group consisting of: video, still-frame video, audio, graphics, text, animation, and media objects.

50. (Original)   A system as described in claim 49 wherein the still-frame video comprises scalable video frames.

51. (Original)   A system as described in claim 49 wherein the audio comprises less than CD-quality audio.

52. (Original)   A system as described in claim 36 further comprising a digital compressor that compresses the plurality of digital programming components before they reach the multiplexer.

53. (Original)   A system as described in claim 38 further comprising a means for digital compressing the plurality of digital programming components before they reach the combining means.

54. (Original)   A system as described in claim 37 further comprising a digital decompressor that decompresses the plurality of digital programming components, and wherein the processor further coordinates and directs the function of the decompressor.

55. (Original)   A system as described in claim 39 further comprising means for digitally decompressing the plurality of digital programming components, and wherein the processing means further coordinates and directs the function of the decompressing means.

56. (Original)   A system as described in claim 36 further comprising a synchronization component that synchronizes the plurality of digital programming components before they reach the multiplexer.

57. (Original)   A system as described in claim 38 further comprising a means for synchronizing the plurality of digital programming components before they reach the combining means.

58. (Original)   A system as described in claim 36 further comprising a modulator that modulates the multiplexed digital programming components before they reach the transmitter.

59. (Original)   A system as described in claim 38 further comprising a means for modulating the combined digital programming components before they reach the transmitting means.

60. (Original)   A system as described in claim 36 further comprising a memory for storing the plurality of digital programming components before they reach the multiplexer.

61. (Original)   A system as described in claim 38 further comprising a means for storing the plurality of digital programming components before they reach the combining means.

62. (Original)   A system as described in claim 36 further comprising a memory that stores user profile information of the at least one of the plurality of users, wherein the processor further coordinates and directs the function of the memory, and wherein the at least one component programming segment is targeted to the at least one of the plurality of users based upon the user profile information of the at least one of the plurality of users, to provide particular differentiable programming content to the at least one of the plurality of users.

63. (Original)   A system as described in claim 37 wherein at least one component programming segment is targeted toward the at least one user to provide particular differentiable programming content to the at least one user, and wherein the signal selector further selects the at least one component programming segment based upon information in the at least one subset of the plurality of digital programming components that the at least one component programming segment is targeted to the at least one user.

64. (Original)   A system as described in claim 63 further comprising a memory for storing user profile information of the at least one user, wherein the signal selector further selects the at least one component programming segment that is targeted to the at least one user based upon the user profile information of the at least one user.

65. (Original)   A system as described in claim 36 wherein transmitter transmits the digital programming transmission stream over a transmission medium selected from the group consisting

of: terrestrial television broadcast, cable, satellite, microwave, radio, telephony, wireless telephony, digital subscriber line, fiber optic, a personal communications network, and a communication network.

66. (Original)   A system as described in claim 37 wherein the receiver receives the digital programming transmission stream over a transmission medium selected from the group consisting of: terrestrial television broadcast, cable, satellite, microwave, radio, telephony, wireless telephony, digital subscriber line, fiber optic, a personal communications network, and a communication network.

67. (Original)   A system as described in claim 65 or claim 66 wherein the communication network is selected from the group consisting of: the Internet, an intranet, a local area network, a wide area network, a public network, and a private network.

68. (Original)   A system as described in claim 66 further comprising a network connector that provides a connection with the communication network for receiving the plurality of digital programming components from the communication network.

69. (Original)   A system as described in claim 39 further comprising a means for connecting the receiving means with a communication network, wherein the plurality of digital programming components are received over the communication network.

70. (Original)   A system as described in claim 36 or claim 37 wherein the differentiable programming content comprises advertising programming content.

71. (Original)   A system as described in claim 36 or claim 37 wherein the differentiable programming content comprises programming content selected from the group consisting of: news, sports, entertainment, situation comedy, music video, game show, movie, drama, educational programming, interactive video gaming, and live programming.

72. (Original)   A system as described in claim 37 further comprising a signal switcher that

switches from a first of the at least one component programming segment to a second of the at least one component programming segment, and wherein the processor further coordinates and directs the function of the signal switcher.

73. (Original)   A system as described in claim 72 wherein the switch by the signal switcher is seamless, whereby the switch is performed without a delay perceptible by the at least one user between presentation of the first of the at least one component programming segment and presentation of the second of the at least one component programming segment on the presentation device.

74. (Original)   A system as described in claim 37 wherein the presentation device comprises a device selected from the group consisting of: television, radio, video tape player, audio tape player, digital video disk player, compact digital disk player, minidisk player, digital file player, video game player, computer, personal digital assistant device, telephone, wireless telephone, and a telephony device for the deaf

75-76. (Canceled)

77. (Previously presented)   A method of receiving an increased quantity of differentiable advertising segments in a programming transmission system, the differentiable advertising segments received by at least one user via a digital programming transmission stream, the method comprising:
        receiving a plurality of synchronized digital programming components in the digital programming transmission stream, the plurality of digital programming components utilizing a bandwidth of the digital programming transmission stream less than or equal to a bandwidth normally allocated for a full-motion audio-video segment, wherein the full motion audio-video segment is a unit of differentiable programming content, wherein a plurality of subsets of the digital programming components replace the standard digital programming segment in the digital programming transmission stream; and
        selecting for presentation at least one subset of the plurality of digital programming components, the selection performed by a processor implementing at least one command code, the selection based upon packet identification numbers of a plurality of packets comprising the at least

one subset, the at least one subset comprising at least one advertising segment, wherein the at least one advertising segment is also a unit of differentiable programming content;

wherein, without increasing the bandwidth normally allocated for a full motion audio-video segment, the quantity of differentiable advertising segments received in the digital programming transmission stream is increased.

78. (Original)   A method as described in claim 77 wherein the plurality of digital programming components are selected from the group consisting of: video, still-frame video, audio, graphics, text, animation, and media objects.

79. (Original)   A method as described in claim 77 wherein the step of receiving further comprises receiving the at least one command code in the digital programming transmission stream.

80. (Original)   A method as described in claim 77 further comprising receiving the at least one command code from a user via a user interface.